Schwegman • Lundberg • Woessner • Kluth

United States Patent Application

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled: **TRANSGENIC CIRCULATING ENDOTHELIAL CELLS**.

The specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. § 1.56 (attached hereto). I also acknowledge my duty to disclose all information known to be material to patentability which became available between a filing date of a prior application and the national or PCT international filing date in the event this is a Continuation-In-Part application in accordance with 37 C.F.R. §1.63(e).

I hereby claim foreign priority benefits under 35 U.S.C. §119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

No such claim for priority is being made at this time.

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

Application Number 60/109,687

Filing Date

November 24, 1998

I hereby claim the benefit under 35 U.S.C. § 120 or 365(c) of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Application Number PCT/US99/28033

Filing Date November 24, 1999 Status Pending

Signature:

I hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

all business in the P	atent and Trademai	k Office connected her	ewiiii:				
	D N 04.016	Heady John I	Reg. No. 36,154	Nielsen, Walter W.	Reg. No. 25,539		
Anglin, J. Michael	Reg. No. 24,916	Haack, John L. Harris, Robert J.	Reg. No. 37,346	Padys, Danny J.	Reg. No. 35,635		
Arora, Suneel	Reg. No. 42,267	Hill, Stanley K.	Reg. No. 37,548	Parker, J. Kevin	Reg. No. 33,024		
Beekman, Marvin L.	Reg. No. 38,377	Jackson Huebsch, Katharine A.	Reg. No. 47,670	Perdok, Monique M.	Reg. No. 42,989		
Bianchi, Timothy E.	Reg. No. 39,610	Jurkovich, Patti J.	Reg. No. 44,813	Peterson, David C.	Reg. No. 47,857		
Billion, Richard E.	Reg. No. 32,836	·	Reg. No. 37,650	Prout, William F.	Reg. No. 33,995		
Black, David W.	Reg. No. 42,331	Kalis, Janal M. Klima-Silberg, Catherine I.	Reg. No. 40,052	Schumm, Sherry W.	Reg. No. 39,422		
Brennan, Leoniede M.	Reg. No. 35,832		Reg. No. 32,146	Schwegman, Micheal L.	Reg. No. 25,816		
Brennan, Thomas F.	Reg. No. 35,075	Kluth, Daniel J.	Reg. No. 41,136	Scott, John C.	Reg. No. 38,613		
Brooks, Edward J., III	Reg. No. 40,925	Lacy, Rodney L.	Reg. No. 36,198	Smith, Michael G.	Reg. No. 45,368		
Chadwick, Robin A.	Reg. No. 36,477	Lemaire, Charles A.	Reg. No. 40,062	Speier, Gary J.	Reg. No. 45,458		
Clark, Barbara J.	Reg. No. 38,107	LeMoine, Dana B.	Reg. No. 30,568	Steffey, Charles E.	Reg. No. 25,179		
Clise, Timothy B.	Reg. No. 40,957	Lundberg, Steven W. Maki, Peter C.	Reg. No. 42,832	Stordal, Leif T.	Reg. No. 46,251		
Dahl, John M.	Reg. No. 44,639		Reg. No. 44,894	Terry, Kathleen R.	Reg. No. 31,884		
Drake, Eduardo E.	Reg. No. 40,594	Malen, Peter L.	Reg. No. 35,271	Tong, Viet V.	Reg. No. 45,416		
Embretson, Janet E.	Reg. No. 39,665	Mates, Robert E.	Reg. No. 42,858	Viksnins, Ann S.	Reg. No. 37,748		
Fordenbacher, Paul J.	Reg. No. 42,546	McCrackin, Ann M.	Reg. No. 33,742	Vogel, Peter J.	Reg. No. 41,363		
Forrest, Bradley A.	Reg. No. 30,837	Moore, Charles L., Jr.	Reg. No. 44,255	Woessner, Warren D.	Reg. No. 30,440		
Gamon, Owen J.	Reg. No. 36,143	Nama, Kash	Reg. No. 28,650	Woodshor, Warren 2.	1108.1.11		
Gortych, Joseph E.	Reg. No. 41,791	Nelson, Albin J.	Reg. No. 20,000				
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			inata dimant	ly with the person/essignes	/attornes/		
I hereby author	rize them to act and rel	y on instructions from and c	communicate direct	ty with the person assigned	1 often full displaying		
firm/organization/who/v	which first sends/sent the	his case to them and by who	m/which I hereby d	lectare that I have consented	1 after full disclosure		
to be represented unless	s/until I instruct Schwe	gman, Lundberg, Woessner	& Kluth, P.A. to th	e contrary.			
					tod balow:		
Please direct all corresp	ondence in this case to	Schwegman, Lundberg, V	voessner & Kium	, P.A. at the address mulca	led below.		
E 250		P.O. Box 2938, Minnea	ipolis, MN 55402				
		Telephone No. (61	12)373-6900				
82		-					
I hereby decla	11 1 11 11 11 11 11 11	ade herein of my own know	ledge are true and t	hat all statements made on	information and		
I hereby declar	re that an statements in	ade herem of my own know	reage are true and t	a that willful false statemen	ts and the like so		
belief are believed to be	e true; and further that	these statements were made	with the knowledge	e mai wimui iaise statemen	ts and the fixe so		
made are punishable by	fine or imprisonment,	or both, under Section 100	of Title 18 of the	United States Code and that	t such willful false		
made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.							
Statements may jeopard	nzo uno , union, en est	71					
		1 . AD Wakkal					
Full-Name of joint inve		obert P. Hebbel	D 11 Mandle	Oaka MN			
Citizenship:	United States of America Residence: North Oaks, MN						
Post Office Address:	25 Island R	toad					
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	North Oaks						
	North Oaks	s, MN 55127		·> #			
	North Oaks		Data	5. 9.01			
Signature:	There		Date:	5. 9.01			
Signature:	North Oaks Robert P. Hebbel		Date:	5. 9.01			
Signature:	There		Date:	5. 9.01			
Signature:	There		Date:	5. 9.01			
	Robert P. Hebbel	5, MN 55127	Date:	5. 9.01			
Full Name of joint inve	Robert P. Hebbel	i Lin					
Full Name of joint inve	Robert P. Hebbel entor number 2: Y United Sta	i Lin utes of America	Date:				
Full Name of joint inve	Robert P. Hebbel entor number 2: Y United Sta	i Lin					
Full Name of joint inve	Robert P. Hebbel entor number 2: Y United Sta 1410 Carli	i Lin ntes of America ng Drive, #108					
Full Name of joint inve	Robert P. Hebbel entor number 2: Y United Sta	i Lin ntes of America ng Drive, #108					

Date:

 \underline{X} Additional inventors are being named on separately numbered sheets, attached hereto.

Attorney Docket No.: 600.449US1

Serial No. not assigned Filing Date: not assigned

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of joint invent Citizenship: Post Office Address:	or number 3: John S. Lollar United States of America 2568 Oak Crossing Drive Decatur, GA 30033	Residence: Decatur, GA	
Signature:	John S. Lollar	Date:	
Full Name of inventor: Citizenship: Post Office Address:		Residence:	
Signature:		Date:	
Full Name of inventor: Citizenship: Post Office Address:		Residence:	
Signature:		Date:	
Full Name of inventor: Citizenship: Post Office Address:		Residence:	
Signature:	- 1	Date:	

Attorney Docket No.: 600.449US1 Serial No. not assigned Filing Date: not assigned

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§ 1.56 Duty to disclose information material to patentability.

- (a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:
 - (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
 - (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.
- Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and
 - (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
 - (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the prependerance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

- (c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:
 - (1) Each inventor named in the application:
 - (2) Each attorney or agent who prepares or prosecutes the application; and
 - (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.
- (d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

Attorney Docket No. 600,449US1

SCHWEGMAN · LUNDBERG · WOESSNER · KLUTH

United States Patent Application

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled: TRANSGENIC CIRCULATING ENDOTHELIAL CELLS.

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60/109,687

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Application Number PCT/US99/28033

Filing Date

Status

November 24, 1999

Pending

Page 2 of 4 Attorney Docket No.: 600,449US1 Serial No. not assigned Filing Date: not assigned I hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith: Anglin, J. Michael Reg. No. 24,916 Haack, John L. Reg. No. 36,154 Nielsen, Walter W. Reg. No. 25,539 Reg. No. 37,346 Reg. No. 42,267 Harris, Robert J. Padys, Danny J. Reg. No. 35,635 Arora, Suneel Reg. No. 37,548 Reg. No. 33,024 Beekman, Marvin L. Reg. No. 38,377 Hill, Stanley K. Parker, J. Kevin Bianchi, Timothy E. Reg. No. 39,610 Jackson Huchsch, Katharine A. Reg. No. 47,670 Perdok, Monique M. Reg. No. 42,989 Billion, Richard E. Reg. No. 44,813 Reg. No. 32,836 Jurkovich, Patti J. Peterson, David C. Reg. No. 47,857 Black, David W. Reg. No. 42,331 Kalis. Janal M. Reg. No. 37,650 Prout, William F. Reg. No. 33,995 Reg. No. 40,052 Reg. No. 39.422 Brennan, Leonicde M. Reg. No. 35,832 Klima-Silberg, Catherine I. Schumm_Sherry W. Brennan, Thomas F. Reg. No. 35,075 Reg. No. 32,146 Kluth, Daniel J. Schwegman, Micheal L. Reg. No. 25,816 Reg. No. 40,925 Brooks, Edward J., 11) Lacy, Rodney L. Reg. No. 41,136 Scott, John C. Reg. No. 38,613 Reg. No. 36,477 Chadwick, Robin A. Lemaire, Charles A. Reg. No. 36,198 Smith, Michael G. Reg. No. 45,368 Clark, Burbara J. Reg. No. 38,107 LeMoine, Dana B. Reg. No. 40,062 Speier, Gary 1. Reg. No. 45,458 Rcg. No. 40,957 Rcg. No. 30,568 Clise, Timothy B. Lundberg, Steven W. Steffey, Charles E. Reg. No. 25,179 Reg. No. 42,832 Rcg. No. 44,639 Dahl, John M. Maki, Peter C. Stordal, Leif T. Reg. No. 46,251 Drake, Eduardo E. Reg. No. 40,594 Malen, Peter L. Reg. No. 44,894 Reg. No. 31,884 Terry Kathleen R. Reg. No. 39,665 Embreison, Janet E. Mates, Robert E. Reg. No. 35,271 Tong. Vier V. Rcg. No. 45,416 Fordenbacher, Paul J. Reg. No. 42,546 McCrackin, Ann M. Reg. No. 42,858 Viksnins, Ann S. Reg. No. 37,748 Forrest, Bradley A. Reg. No. 30,837 Moore, Charles L., Jr. Reg. No. 33,742 Reg. No. 41,363 Vogel, Peter J. Gamon, Owen J. Reg. No. 36,143 Nama, Kash Reg. No. 44,255 Wocasner, Warren D. Reg. No. 30,440 Gortych, Joseph E. Reg. No. 41,791 Nelson, Albin J. Reg. No. 28,650 I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/ fin/organization/who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure be represented unless/until I instruct Schwegman, Lundberg, Woessner & Kluth, P.A. to the contrary. Prease direct all correspondence in this case to Schwegman, Lundberg, Woessner & Kluth, P.A. at the address indicated below: P.O. Box 2938, Minneapolis, MN 55402 and and Telephone No. (612)373-6900 I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and billief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon. Full Name of joint inventor number 1: Robert P. Hebbel Citizenship: United States of America Residence: North Oaks, MN Post Office Address: 25 Island Road North Oaks, MN 55127 Signature: Date: Robert P. Hobbel Full Name of joint inventor number 2: Yi Lin Citizenship: United States of America Residence: St. Paul, MN Post Office Address: 1410 Carling Drive, #108 St. Paul, MN 55108 Signature:

Date:

X Additional inventors are being named on separately numbered sheets, attached hereto.

Yi Lin

Attorney Docket No.: 600,449US1 Serial No. not assigned Filing Date: not assigned

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and

Page 3 of 4

belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon. Full Name of joint inventor number 3: John S. Lollar Residence: Decatur, GA Citizenship: United States of America Post Office Address: 2568 Qak Crossing Drive Decatur, GA 30033 5/2/01 Date: Signature: John S. Lollar 'Full Name of inventor: Citizenship: Residence: Post Office Address: Total P T Signature: Date: Full Name of inventor: Citizenship: Residence: Post Office Address: The state of Signature: Date: Full Name of inventor: Citizenship: Residence: Post Office Address: Signature: Date:

Attorney Docket No.: 600.449US1 Serial No. not assigned Filing Date: not assigned

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Page 4 of 4

- § 1.56 Duty to disclose information material to patentability.
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 - Each inventor named in the application:
 - Each attorney or agent who prepares or prosecutes the application; and
 - Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.
- (d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor,